PROPOSED REGULATION OF THE

PUBLIC UTILITIES COMMISSION OF NEVADA

LCB File No. R043-08

June 25, 2008

EXPLANATION - Matter in *italics* is new; matter in brackets [omitted material] is material to be omitted.

AUTHORITY: §\$1-3 and 7-9, NRS 703.025, 704.110 and 704.210; §4, NRS 703.025 and 704.110; §\$5 and 6, NRS 703.025, 704.110 and 704.355; §\$10-48, NRS 703.025, 704.110 and 704.661; §\$49 and 50, NRS 703.025, 703.095, 704.110 and 704.660.

A REGULATION relating to utilities; establishing the standards for obtaining a waiver of certain requirements concerning general rate applications by certain public utilities that furnish water or services for the disposal of sewage; allowing those public utilities to include certain costs in a general rate application; requiring certain public utilities to include certain information concerning potential competitors in an application for a certificate of public convenience and necessity to provide water or services for the disposal of sewage; establishing the form and content of a water resource plan that is required to be submitted to the Public Utilities Commission of Nevada by certain public utilities; establishing procedures for the submission and amendment of such a plan; establishing standards for the maintenance of fire hydrants by certain public utilities; and providing other matters properly relating thereto.

Section 1. Chapter 703 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 and 3 of this regulation:

Sec. 2. The Commission may, upon the request of a public utility that furnishes water for municipal, industrial or domestic purposes or services for the disposal of sewage, or both, and would otherwise be required to file a general rate application pursuant to paragraph (c) or (d) of subsection 3 of NRS 704.110, waive that requirement if the public utility demonstrates that the cost of preparing and presenting the general rate application would exceed the increase, if any, in the amount of revenue that would be obtained if the general rate application were approved by the Commission. The public utility must file a request for a waiver not later than

270 days before the date on which the public utility's general rate application must otherwise be filed.

- Sec. 3. 1. A public utility that furnishes water for municipal, industrial or domestic purposes or services for the disposal of sewage, or both, and files a general rate application pursuant to paragraph (c) or (d) of subsection 3 of NRS 704.110:
- (a) May include in the application the actual expenses to prepare and present the application that are incurred by the public utility during the 6 months immediately following the test period; and
- (b) Must defer to a subsequent general rate application the actual expenses to prepare and present a general rate application that are incurred by the public utility more than 6 months after the test period.
- 2. As used in this section, "test period" means the 12 months shown in the general rate application for which the recorded results of the utility's revenues, expenses, investments and costs of capital were available when the application was prepared.
 - **Sec. 4.** NAC 703.175 is hereby amended to read as follows:
- 703.175 An applicant for a certificate of public convenience and necessity must, in addition to complying with the provisions of NAC 703.530 to 703.615, inclusive, submit the following data, either in the application or as exhibits attached to it:
- 1. A full description of the proposed construction or extension and the manner in which it will be constructed.
- 2. The names and addresses of all utilities, corporations, persons or other entities, whether publicly or privately operated, with which the proposed service or construction is likely to compete and of the cities or counties within which service will be rendered under the requested

certificate. [If a public utility applies to the Commission to extend or establish its water service within a county water district, a public utility or municipal utility district, other water or utility district or any area served by such a district, that district must also be named if it furnishes a similar service.] The application must contain a certification that a copy of the application has been served upon or mailed to each entity named.

- 3. A legible map of suitable scale indicating townships, ranges and sections, and showing the location or route of the proposed construction or extension and its relation to other public utilities, corporations, persons or entities with which the proposal is likely to compete.
- 4. A statement identifying the franchise and the permits for health and safety that appropriate public authorities require for the proposed construction or extension. If a construction permit is required under NRS 704.820 to 704.900, inclusive, application must also be made under NAC 703.415 to 703.427, inclusive.
- 5. Facts showing that public convenience and necessity requires or will require the proposed construction or extension.
- 6. A statement detailing the estimated cost of the proposed construction or extension and the estimated annual costs, both fixed and operating, associated with the proposal, including statements or exhibits showing that the proposed construction is in the public interest and that it is economically feasible.
- 7. Statements or exhibits showing the financial ability of the applicant to render the proposed service and information regarding the manner in which the applicant proposes to finance the cost of the proposed construction or extension, including a copy of its most recent balance sheet and statement of income.

- 8. A statement of the proposed rates to be charged for service to be rendered by means of the proposed construction or extension, the rules governing service in the form of a tariff, an estimate of the number of customers to be served and an estimate of the annual revenue to be received from those customers.
 - 9. If the applicant is a corporation, a list of:
- (a) The shareholders holding 2 percent or more of the issued shares of stock of the corporation and the number of shares they hold listed by class.
- (b) The number of shares of stock, listed by class, held directly by all executive officers of the corporation, including the president, vice president, secretary, treasurer and any other person in a position of similar responsibility, and the number of shares held indirectly by those officers pursuant to an ownership plan for employees.
 - 10. Such additional information as is necessary for a full understanding of the application.
 - **Sec. 5.** NAC 703.190 is hereby amended to read as follows:
- 703.190 *I.* In the case of a water utility, in addition to all applicable requirements of NAC 703.175, an application [for a certificate of public convenience and necessity, or an application to amend an existing certificate of public convenience and necessity, to provide water service] must include the following information regarding its technical, managerial and financial capability to operate the system in a reliable manner and provide continuous and adequate service to its customers:
 - (a) To demonstrate technical capability, the applicant must provide:
- [(a)] (1) Evidence that there is a need for a water utility. [and no other utility is willing or able to serve the proposed service area.

- (b)] (2) Written agreements or statements from property owners, approved subdivision maps and any other documentation that demonstrates the need for water service in the area for which the certificate is requested.
- [(e)] (3) Evidence that any required construction or operating permit from other state and local agencies has been obtained and is in effect, or that an application for such a permit has been submitted to other state and local agencies and the date of its anticipated issuance.
- [(d)] (4) A plan that demonstrates the continuing ability of the utility to meet the needs, relating to water resources, of the entire service area to be served by the utility. In lieu of such a plan, the utility may provide information which demonstrates that the utility has adequate resources to meet such needs, including, without limitation:
 - [(1)] (I) Copies of all documents evidencing water rights and accompanying maps.
 - [(2)] (II) Hydrological data defining the reliability of the source.
- [(3)] (III) Any additional information which is necessary to demonstrate the ability of the utility to meet [such] those needs.
- [(e)] (5) An estimate of the number of customers [to] that will be served in the proposed service area [through] during the first 5 years of service, and the estimated number of customers at build-out of the proposed service area.
- [(f)] (6) A full description of the proposed water system, including the proposed normal operating and emergency standby water facilities to serve the area for which the certificate is sought.
- [(g)] (7) If the utility facilities will be phased in as customers are added, a description of the phasing thresholds for each utility facility that will be phased in.
 - [2.] (b) To demonstrate managerial capability, the applicant must provide:

- [(a)] (1) An operations and maintenance plan for the proposed water utility, including, without limitation:
- [(1)] (1) The contact information for all principal managers, certified operators and customer service representatives of the system;
- [(2)] (II) The normal procedures for maintenance used to ensure the proper operation of the system; and
 - [(3)] (III) A plan describing how worn-out utility facilities [are to] will be replaced.
- [(b)] (2) A standard operating procedure for all employee communications not covered by the proposed tariff.
 - (c) (3) A training protocol for all employees.
- [(d)] (4) Evidence that the applicant will maintain its books and records consistent with the system of accounts established by the National Association of Regulatory Utility Commissioners for water utilities.
 - [3.] (c) To demonstrate financial capability, the applicant must provide:
- [(a)] (1) An explanation of whether and to what extent customers will directly or indirectly make contributions to the costs of the facilities of the proposed water system. The explanation must indicate whether the applicant intends to assess charges or has assessed charges for the extension of any lines and whether the price of lots or units in the proposed service area will reflect the cost of the investment in the proposed system.
- [(b)] (2) Evidence that the proposed revenues from reasonable rates will give the applicant an opportunity to earn a fair return on its regulated rate base.
- [(e)] (3) A statement of the estimated operating revenues and expenses, including taxes and depreciation, for the first 5 years of operation in the proposed service area for each major class of

service. If the applicant anticipates that the system will initially operate at a loss, the statement must identify the sources of money that will be used to sustain the operation of the system during that initial period.

- (4) A depreciation schedule for the different water treatment facilities.
- [(e)] (5) A method for replacing rate base when the utility facility reaches the end of its service life.
- [(f)] (6) A copy of a performance bond or other suitable assurance deposited with the Federal Government or local government to guarantee construction of any improvements or infrastructure required for approval of final subdivision maps.
- 2. In addition to the information required by subsection 1, a water utility must include in its application for a certificate of public convenience and necessity:
- (a) If the application is for an initial certificate to provide water service, proof that the utility inquired of each utility, person or other entity, whether publicly or privately operated, including, without limitation, a county water district, a public utility or municipal utility district, and any other water or utility district with which the proposed water service is likely to compete and each city or county within which the water service will be rendered under the requested certificate, whether the entity is ready, willing and able to provide the water service in the geographic area proposed by the applicant for the certificate. The application must set forth in detail the results of each inquiry.
- (b) If the application is for a certificate to establish or extend water service within a county water district, a public utility or municipal utility district, any other water or utility district, or any other area that is served by such a district, the name and address of the district and certification that a copy of the application has been served upon or mailed to the district.

- **Sec. 6.** NAC 703.195 is hereby amended to read as follows:
- 703.195 *I.* In the case of a wastewater utility, in addition to all other applicable requirements of NAC 703.175, an application [for a certificate of public convenience and necessity] must include the following information regarding its technical, managerial and financial capability to operate the system in a reliable manner and provide continuous and adequate service to its customers:
 - [1.] (a) To demonstrate technical capability, the applicant must provide:
- [(a)] (1) Evidence that there is a need for a wastewater utility. [and no other utility is willing or able to serve the proposed service area.
- (b)] (2) Written agreements or statements from property owners, approved subdivision maps and any other documentation that demonstrates the need for wastewater service in the area for which the certificate is requested.
- [(e)] (3) Evidence that any required construction or operating permit from other state and local agencies has been obtained and is in effect, or that an application for such a permit has been submitted to other state and local agencies and the date of its anticipated issuance.
- [(d)] (4) A plan that demonstrates the continuing ability of the utility to meet the needs, relating to wastewater treatment and disposal, of the entire service area to be served by the utility.
- [(e)] (5) An estimate of the number of customers [to] that will be served in the proposed service area [through] during the first 5 years of service, and the estimated number of customers at build-out of the proposed service area.

- [(f)] (6) A full description of the proposed wastewater system, including the proposed normal operating and emergency standby wastewater facilities to serve the area for which the certificate is sought.
- [(g)] (7) If the utility facilities will be phased in as customers are added, a description of the phasing thresholds for each utility facility that will be phased in.
 - [2.] (b) To demonstrate managerial capability, the applicant must provide:
- [(a)] (1) An operations and maintenance plan for the proposed wastewater utility, including, without limitation:
- [(1)] (1) The contact information for all managers, certified operators and customer service representatives of the system.
- [(2)] (II) The normal procedures for maintenance used to ensure the proper operation of the system.
 - [(3)] (III) A plan describing how worn-out utility facilities [are to] will be replaced.
- [(b)] (2) A standard operating procedure for all employee communications not covered by the proposed tariff.
 - (3) A training protocol for all employees.
- [(d)] (4) Evidence that the applicant will maintain its books and records consistent with the system of accounts established by the National Association of Regulatory Utility Commissioners for wastewater utilities.
 - [3.] (c) To demonstrate financial capability, the applicant must provide:
- [(a)] (1) An explanation of whether and to what extent customers will directly or indirectly make contributions to the costs of the facilities of the proposed wastewater system. The explanation must include an indication of whether the applicant intends to assess charges for the

extension of any lines and whether the price of lots or units in the proposed service area will reflect the cost of the investment in the proposed system.

- [(b)] (2) Evidence that the proposed revenues from reasonable rates will give the applicant an opportunity to earn a fair return on its regulated rate base.
- [(e)] (3) A statement of the estimated operating revenues and expenses, including taxes and depreciation, for the first 5 years of operation in the proposed service area for each major class of service. If the applicant anticipates that the system will initially operate at a loss, the statement must identify the sources of money that will be used to sustain the operation of the system during that initial period.
 - (4) A depreciation schedule for the different wastewater treatment facilities.
- [(e)] (5) A method for replacing rate base when the utility facility reaches the end of its service life.
- [(f)] (6) A copy of a performance bond or other suitable assurance deposited with the Federal Government or local government to guarantee construction of any improvements or infrastructure required for approval of final subdivision maps.
- 2. In addition to the information required by subsection 1, a wastewater utility must include in its application for a certificate of public convenience and necessity:
- (a) If the application is for an initial certificate to provide wastewater service, proof that the utility inquired of each utility, person or other entity, whether publicly or privately operated, including, without limitation, a county sewer district, a public utility or municipal utility district, and any other sewer or utility district with which the proposed wastewater service is likely to compete and each city or county within which the wastewater service will be rendered under the requested certificate, whether the entity is ready, willing and able to

provide the wastewater service in the geographic area proposed by the applicant for the certificate. The application must set forth in detail the results of each inquiry.

- (b) If the application is for a certificate to establish or extend wastewater service within a county sewer district, a public utility or municipal utility district, any other sewer or utility district or any other area that is served by such a district, the name and address of the district and certification that a copy of the application has been served upon or mailed to the district.
 - **Sec. 7.** NAC 703.2201 is hereby amended to read as follows:
- 703.2201 As used in NAC 703.2201 to 703.2481, inclusive, *and sections 2 and 3 of this regulation*, unless the context otherwise requires:
- 1. "Uniform system of accounts" means uniform system of accounts prescribed for public utilities and licensees, classes A, B, C and D, which were published by the Federal Energy Regulatory Commission and adopted by reference in NAC 704.650.
- 2. "Unit" means the quantitative measurement of an item, or level of use, consumption or effort.
- 3. "Unit rate" is that rate which when multiplied by the number of units within a given period results in the aggregate dollar amount applicable to that period.
 - **Sec. 8.** NAC 703.2205 is hereby amended to read as follows:
- 703.2205 The provisions of NAC 703.2201 to 703.2481, inclusive, *and sections 2 and 3 of this regulation* apply to all:
 - 1. Public utilities which produce, deliver or furnish electricity or gas;
 - 2. Telegraph and community antenna television companies; and
- 3. Public utilities which furnish water or sewer service, or both, and are not subject to the provisions of NAC 704.570 to 704.628, inclusive, under the jurisdiction of the Commission.

- **Sec. 9.** NAC 703.2207 is hereby amended to read as follows:
- 703.2207 1. A public utility that furnishes electricity, gas or water which has an annual gross revenue of more than [\$1,000,000] \$500,000 from intrastate operations in this State must provide written notice of its intent to file an application for adjustments in rates to:
 - (a) The Secretary of the Commission;
 - (b) The staff of the Commission assigned to regulatory operations; and
 - (c) The Consumer's Advocate.
- 2. The written notice must be filed at least 60 days before the anticipated date for filing the application for adjustments in rates. If the public utility files the written notice, it is not required to file the application for adjustments in rates on the anticipated filing date or any time thereafter.
- 3. The written notice must contain a list of the components on which the public utility expects to base its application for adjustments in rates, including:
 - (a) Cost of capital;
 - (b) Depreciation;
 - (c) Cost of service, including any study of the cost of service;
 - (d) Design of the proposed rates; and
 - (e) Any other material issues known at the time the notice is filed.
- **Sec. 10.** Chapter 704 of NAC is hereby amended by adding thereto the provisions set forth as sections 11 to 49, inclusive, of this regulation.
- Sec. 11. As used in sections 11 to 48, inclusive, of this regulation, unless the context otherwise requires, the words and terms defined in sections 12 to 19, inclusive, of this regulation have the meanings ascribed to them in those sections.

- Sec. 12. "Action plan" means a detailed specification of the actions that a utility intends to take to meet its water demand, supply and wastewater treatment requirements during the 3 years immediately following the year in which its resource plan is filed with the Commission.
- Sec. 13. "Conservation plan" means the plan developed by a utility for water conservation for the term of a resource plan.
- Sec. 14. "Funding plan" means the plan developed by a utility that demonstrates the financial impact of an action plan on the utility and its customers.
- Sec. 15. "Resource plan" means the plan developed by a utility for the provision of water or services for the disposal of the sewage of its customers for a period of 20 years immediately following the year in which the resource plan is filed with the Commission.
- Sec. 16. "Utility" means a public utility that is required to submit a resource plan pursuant to NRS 704.661.
- Sec. 17. "Wastewater treatment" means any service for the disposal of sewage. The term includes, without limitation, the collection of sewage, disposal of effluent and the reclamation of water.
- Sec. 18. "Water supply and wastewater treatment plan" means the plan developed by a utility to meet its forecasted demand for water and requirements for wastewater treatment during the term of a resource plan. The term includes a wastewater treatment plan submitted by a utility that provides only services for the disposal of sewage.
- Sec. 19. "Water year" means the amount of rainfall recorded between January 1 and December 31 by the National Weather Service of the National Oceanic and Atmospheric Administration of the United States Department of Commerce.

- Sec. 20. A utility must, not later than 4 months before the date on which the utility intends to file its resource plan with the Commission, meet with the Bureau of Consumer Protection in the Office of the Attorney General and the Regulatory Operations Staff of the Commission and provide an overview of the utility's resource plan.
- Sec. 21. If a utility believes that any provision of sections 11 to 48, inclusive, of this regulation is not applicable to the utility, it must identify the provision in its resource plan and demonstrate why the provision is not applicable to the utility.
- Sec. 22. The resource plan of a utility must include written testimony in support of the resource plan.
- Sec. 23. 1. The resource plan of a utility must include and provide an integrated analysis of the utility's:
 - (a) Conservation plan;
 - (b) Water supply and wastewater treatment plan;
 - (c) Funding plan; and
 - (d) Action plan.
- 2. The analysis must establish priorities among the utility's options for water conservation, water supply, wastewater treatment and funding to enable the Commission to determine the extent to which the utility's action plan balances the objectives of minimizing cost, mitigating risk and maximizing reliability of service over the term of the action plan.
- Sec. 24. The resource plan of a utility must be accompanied by a summary that is suitable for distribution to the public. Any tables, graphs or maps used in the summary must be easily interpretable by the public. The summary must include, without limitation:

- 1. A brief introduction that describes the utility, its facilities and the purpose of the resource plan;
- 2. A statement that identifies the issues relating to the supply of water and services for the disposal of sewage and the utility's strategy for addressing those issues;
- 3. A description of the criteria used by the utility to develop the resource plan, including, without limitation, a summary of each forecast prepared by the utility pursuant to section 27 of this regulation;
- 4. A statement that identifies the utility's current and projected requirements during the term of the resource plan for each of the following:
 - (a) Water supply;
 - (b) Water rights;
 - (c) Storage;
 - (d) Transmission and distribution system;
 - (e) Fire flows and fire hydrants;
 - (f) Wastewater treatment; and
 - (g) Water conservation; and
- 5. The methods that the utility proposes to use to defray the costs related to the resource plan.
 - Sec. 25. The resource plan of a utility must include, without limitation:
 - 1. The current and historical ownership and organization of the utility;
- 2. The name and qualifications of each person who participated in the development of the resource plan;

- 3. A description of the manner in which the information in the resource plan is organized and a definition of each specialized term, acronym or abbreviation used in the resource plan;
- 4. A description of the utility's service area, including, without limitation, the number of customers in each class of service within the service area;
- 5. A statement identifying the issues relating to the supply of water and services for the disposal of sewage;
 - 6. The objectives of the resource plan; and
- 7. A map that indicates the geographic areas included in the resource plan. Each map must indicate the portion of the service area of the utility indicated on the map:
 - (a) The service area of the utility included in the resource plan;
 - (b) The locations of the utility's facilities;
- (c) The location of all water supplies that are owned by the utility or under contract to the utility;
- (d) The interconnections between the utility's system and the systems of other utilities and suppliers of water;
 - (e) The utility's facilities for water transmission; and
 - (f) The location of each site for:
 - (1) The collection of sewage;
 - (2) The disposal of effluent;
 - (3) The reclamation of water; and
 - (4) Any other type of treatment of wastewater that is under contract to the utility.
- Sec. 26. 1. The resource plan of a utility must include a technical appendix. The appendix must be prepared in sufficient detail to enable a technically proficient person to:

- (a) Understand how the resource plan, including, without limitation, the forecasts required pursuant to section 27 of this regulation, was prepared;
 - (b) Verify the adequacy and accuracy of the data used to develop the resource plan; and
 - (c) Evaluate the validity of the assumptions and methods used to develop the resource plan.
 - 2. The appendix must include, without limitation:
 - (a) A list of the major assumptions used to develop the resource plan;
 - (b) A description of the forecasting methods used to develop the resource plan;
 - (c) A description of any computer software used to develop the resource plan;
- (d) Citations to the sources of all significant information used to develop the resource plan;
- (e) A description of each model and formula used, including documentation to the extent consistent with any proprietary restrictions imposed upon the utility by a supplier of a model;
- (f) Descriptions of all data inputs to the models used to develop the resource plan and an explanation of any modifications made to the data;
 - (g) The final results derived from the models used to develop the resource plan; and
 - (h) Projections of the availability and cost of water rights for the term of the resource plan.
- Sec. 27. 1. The resource plan of a utility must include forecasts for the term of the resource plan of the utility's:
 - (a) Peak demand in summer and winter for water and services for the disposal of sewage;
 - (b) Annual water consumption and wastewater flows; and
 - (c) Annual losses of water from the system.
 - 2. The forecasts must:
 - (a) Apply to the entire system of the utility;

- (b) Be based on the most probable set of future conditions that may effect water consumption and wastewater flows, including, without limitation, the customer base of the utility; and
 - (c) If applicable, be separated according to rate schedule.
- 3. If the utility's forecast includes water from a water source that may not be available at a consistent level of use because of specific legal, environmental, water quality or climatic factors, the utility shall describe its plans to supplement or replace that water source, to the extent practicable, with alternative water sources or measures to manage the demand for water.
 - 4. In preparing the forecasts, the utility shall:
- (a) Describe the opportunities for the exchange or transfer of water with other utilities during the short-term and the long-term; and
- (b) Consider the effects that new technologies and new laws, regulations and other governmental programs may have on the forecasts.
- 5. To verify and complete the forecast, the utility may evaluate the forecast with the results of alternative forecasting methods.
- 6. Any change in the methodology of forecasting used by the utility from the methodology used in the utility's previous resource plan must be identified in the current resource plan of the utility.
- Sec. 28. 1. The resource plan of a utility must include the following information for the entire system of the utility for each of the 10 years immediately preceding the year in which the resource plan is filed with the Commission:
 - (a) The recorded and coincident peak demand for water;

- (b) The recorded and annual sales of water and wastewater flows;
- (c) The estimated or actual amount of water lost;
- (d) The estimated or actual amount of water used;
- (e) The estimated or actual amount of effluent disposed of by the utility; and
- (f) The estimated or actual amount of reclaimed water sold or used by the utility.
- 2. To the extent practicable, the information must be organized by class of service.
- Sec. 29. 1. The resource plan of a utility, other than a utility that provides only services for the disposal of sewage, must include an assessment of the projected reliability of the utility's water service to its customers. The assessment must compare the total projected water supply available to the utility with the total projected water use by the utility's customers during a normal water year, a single dry water year and 3 consecutive dry water years. The assessment must be provided for the 5th, 10th, 15th and 20th years of the resource plan.
- 2. A utility that supplies water to an urban area may, in its resource plan, use estimates of population obtained from any state, regional or local agency within the service area of the utility.
 - 3. As used in this section:
- (a) "Dry water year" means a water year that has rainfall of 40 percent or less than a normal water year.
- (b) "Normal water year" means a water year that has rainfall equal to the average rainfall calculated by the National Weather Service of the National Oceanic and Atmospheric Administration of the United States Department of Commerce.
 - Sec. 30. 1. The conservation plan of a utility must include, without limitation:

- (a) A description of each program of water conservation that the utility has implemented, is implementing or proposes to implement, including, without limitation:
- (1) Water surveys for single-family residential customers and multifamily residential customers;
 - (2) Programs to encourage retrofitting of residential plumbing;
 - (3) Water audits, leak detection and repair;
- (4) The use of water meters with commodity rates for new connections and the retrofitting of existing connections;
- (5) Incentives and other programs of water conservation for golf courses, parks, school grounds and other large landscapes;
 - (6) Rebates or other incentives for the purchase of high-efficiency washing machines;
 - (7) Programs of public information;
 - (8) Educational programs in schools;
- (9) Conservation programs for commercial, industrial, governmental and other customers;
 - (10) The use of conservation pricing;
 - (11) Employment of a person to coordinate the utility's programs of water conservation;
- (12) Prohibitions against wasting water and measures for the enforcement of those prohibitions;
- (13) A program to encourage residential customers to replace existing toilets with ultralow-flush toilets; and
 - (14) Incentives for the reclamation of water and the use of reclaimed water;

- (b) An estimate of the savings in water consumption or the reduction in the demand for water that is attributable to each program;
- (c) An estimate of the effect on the utility's peak demand for water and water consumption for each program;
 - (d) A schedule of implementation for each proposed program;
- (e) A description of the methods, if any, that may be used to evaluate the effectiveness of each program; and
- (f) An estimate of the cost of each program. The estimate must be supported by a statement that sets forth in detail the methods used to determine the estimate, including, without limitation, the data and assumptions used to determine the estimate.
- 2. In developing its conservation plan, a utility must consider the effect that new technologies, including, without limitation, advances in digital and computer information system technologies, may have on current and future conservation programs.
 - 3. The conservation plan must:
- (a) Identify each program for which the utility requests the approval of the Commission; and
- (b) Include a report of the status of each program of water conservation that has been approved by the Commission. The report must provide a table for each program that indicates for each year of the program, the planned and actual reduction in water usage and the costs of the program.
- Sec. 31. The conservation plan of a utility must include an analysis for potential water shortages. The analysis must include, without limitation:

- 1. An outline of the specific water supply conditions that may apply at a 25 percent shortage in the water supply and a 50 percent shortage in the water supply, and a description of the actions that the utility proposes to take in response to a water shortage at each level.
- 2. An estimate of the minimum water supply that will be available to the utility during each of the 3 water years immediately following the year in which the resource plan is submitted. The estimate must be based on the driest 3 consecutive water years that have been recorded for the utility's water supply.
- 3. A description of the actions that the utility proposes to prepare for and implement during a catastrophic interruption of water supplies, including, without limitation, a regional power outage, an earthquake or any other natural or man-made disaster.
- 4. An analysis of the effect that each action and condition set forth in subsections 1, 2 and 3 is likely to have on the revenue and expenditures of the utility. The analysis must set forth the actions, including, without limitation, the development of reserves and the use of rate adjustments, that the utility proposes to take to mitigate those effects.
- Sec. 32. The conservation plan of a utility must provide, to the extent practicable, information about reclaimed water and its potential for use as a water source in the service area of the utility. The utility must coordinate with local water, wastewater, groundwater and planning agencies that operate within the utility's service area to acquire the information. The information must include, without limitation:
- 1. A description of the systems of wastewater treatment in the utility's service area, including, without limitation:
 - (a) The quantities of sewage collected and wastewater treated by the utility; and
 - (b) The utility's methods for the disposal of effluent and the reclamation of water.

- 2. A description of the quantity of treated wastewater that:
- (a) Is discharged by the utility;
- (b) Complies with the standards of water quality for reclaimed water established by the State Environmental Commission pursuant to chapter 445A of NRS; and
 - (c) Is otherwise available for use in a project of water reclamation.
- 3. A description of the reclaimed water that is used in the utility's service area, including, without limitation, the location, quantity and type of each use.
- 4. A description of the potential uses for reclaimed water in the utility's service area, including, without limitation:
 - (a) Agricultural irrigation;
- (b) Irrigation of large landscapes, including, without limitation, golf courses, parks and school grounds;
 - (c) The enhancement of wildlife habitat;
 - (d) The creation, restoration or preservation of wetlands;
 - (e) Industrial uses; and
 - (f) The recharging of groundwater.
- → The utility shall, for each potential use of reclaimed water it identifies, estimate the amount of reclaimed water that could be used and make a determination of the technical and economic feasibility of serving that use.
- 5. A plan to maximize the use of reclaimed water in the utility's service area. The plan must include, without limitation, any action by the utility to:
- (a) Facilitate the installation of systems for the distribution of water that have dedicated lines for the distribution of potable water and reclaimed water;

- (b) Promote the recirculation of water;
- (c) Facilitate the increased use of treated wastewater that complies with the standards of water quality for reclaimed water established by the State Environmental Commission pursuant to chapter 445A of NRS; and
- (d) Identify the impediments to achieving the increased use of treated wastewater and to remove those impediments.
- 6. A projection of the use of reclaimed water within the utility's service area at the end of the 3rd, 10th, 15th and 20th years of the resource plan.
- 7. If a utility has previously submitted a projection of uses for reclaimed water within its service area, a comparison of the actual uses of reclaimed water with the previous projection of uses for reclaimed water.
 - Sec. 33. 1. The water supply and wastewater treatment plan of a utility must:
- (a) Identify and analyze the utility's options for meeting the demand for water and wastewater treatment established in the forecasts prepared by the utility pursuant to section 27 of this regulation; and
- (b) Describe, for each option, the utility's facilities and any new facilities that may be required. The description must set forth the actual or proposed capacity of each facility and the actual or proposed resources available for each year of the water supply and wastewater treatment plan.
 - 2. The options must include, without limitation:
 - (a) The construction of new facilities;

- (b) Improvements to existing facilities, including, without limitation, the retrofitting of the facilities with more efficient systems or the conversion of the facilities for use with other water sources or forms of wastewater treatment;
 - (c) The purchase of water rights;
- (d) Improvements in the efficiency of the utility's operations, including, without limitation, improvements that are attributable to the proposed implementation of new digital and computer information system technologies; and
- (e) Transactions with other utilities that furnish water or provide services for the disposal of sewage and with other water suppliers for:
 - (1) The pooling of water supplies;
 - (2) The purchase of water supplies; or
 - (3) The exchange of water supplies.
- 3. The analysis must consider for each option measures to reduce the risk of interruption in the water supply, including, without limitation:
 - (a) Increasing flexibility in the utility's sources of water supply;
 - (b) Increasing diversity in the utility's sources of water supply;
 - (c) Reducing the utility's commitments for supplying water;
- (d) Selecting projects relating to water supply that can be completed within 3 years immediately following the year in which the resource plan is submitted to the Commission;
 - (e) Reducing the utility's costs of supplying water; and
 - (f) Increasing the reliability of the water supply.
- 4. A utility may not include an option in its water supply and wastewater treatment plan unless the option, if selected by the utility and approved by the Commission, will:

- (a) Provide for a reliable water supply;
- (b) Be within applicable regulatory and financial constraints; and
- (c) Comply with all applicable federal, state or local laws and regulations for the protection of the environment.
- Sec. 34. The water supply and wastewater treatment plan of a utility must include a preferred plan that sets forth the utility's selection of its preferred options for meeting the demand for water and requirements for wastewater treatment for the term of the resource plan. The preferred plan must include an explanation of the criteria that the utility used to select its preferred options. The explanation must include sufficient detail to enable the Commission to determine whether the utility's selection is justified.
- Sec. 35. The water supply and wastewater treatment plan of a utility must include, without limitation:
- 1. A description of the utility's system and the separate components of the system. The description of each component must set forth, if applicable, the location, capacity, type and age of the component and include references to any applicable documentation or other information relating to the description of the component. The components that must be described include, without limitation:
- (a) Sources of water supply, including, if the source is a well, its depth, casing depth, water zone, design capacity and capacity of the well;
- (b) Water rights, including the volume of water established for each water right and its status;
 - (c) Water distribution and transmission lines;
 - (d) Lines for the collection of wastewater;

- (e) Facilities for water storage;
- (f) Emergency standby facilities, including, without limitation, power supplies for the production, treatment, storage and maintenance of water pressure;
 - (g) Pressure-reducing valve stations;
 - (h) Booster stations;
 - (i) Lift stations;
 - (j) Force mains;
 - (k) Facilities for wastewater treatment;
 - (l) Sites for the disposal of effluent;
 - (m) Sites for the reclamation of water;
 - (n) The utility's systems for supervisory control and data acquisition;
 - (o) Hydraulic profile, if any;
 - (p) Operating and elevation levels, if any;
 - (q) Operation and performance of the system; and
 - (r) Programs for the protection of the water supply;
- 2. A map that identifies the location, capacity, elevation and any other applicable data for each existing and proposed facility, including, without limitation, a facility described in subsection 1; and
 - 3. A description of each existing or projected deficiency in the system of the utility.
- Sec. 36. The resource plan of a utility must include a funding plan for each item identified in the utility's conservation plan or water supply and wastewater treatment plan for which the utility proposes to initiate expenditures during the term of the action plan. The

funding plan must include the means the utility proposes to use to minimize the effect of the expenditures on the:

- 1. Rates charged by the utility to its customers; and
- 2. Financial risk to the utility.
- Sec. 37. The funding plan of a utility must set forth information concerning the costs that the utility will incur during the term of the action plan, including, without limitation:
- 1. The estimated costs of any construction identified in the action plan, including, without limitation:
- (a) Annual flows of expenditures with allowance for money expended during construction; and
- (b) Annual flows of expenditures without allowance for money expended during construction; and
 - 2. The projected rates of escalation in costs, including, without limitation:
 - (a) Capital costs; and
 - (b) Fixed operating costs.
- Sec. 38. The funding plan of a utility must include options for defraying the expenditures identified in the plan. Each option must include a combination of:
 - 1. Revenue from customer surcharges;
 - 2. Revenue from customer hook-up fees;
 - 3. Capital investment by the utility;
 - 4. Debt financing by the utility; and
 - 5. Other prudent and reasonable means of defraying the expenditures.

- Sec. 39. 1. The funding plan of a utility must include estimates of the following financial information for the term of the action plan:
 - (a) The present worth of revenue requirements;
 - (b) Revenue requirements by year;
 - (c) The total rate base by year; and
 - (d) Financial results attributable to the utility's strategy of risk management.
- 2. The funding plan must include for each year of the action plan, the assumptions used by the utility relating to:
 - (a) The general rate of inflation;
 - (b) The rates of the cost of capital;
 - (c) The discount rates used to determine present worth;
 - (d) The applicable tax rates; and
 - (e) Any other assumptions used by the utility to develop the funding plan.
 - **Sec. 40.** The action plan of a utility must include, without limitation:
- 1. An introductory section that explains how the action plan relates to the long-term plans of the utility as set forth in its resource plan;
- 2. A section that identifies each action for which the utility requests the approval of the Commission;
- 3. A section that identifies each part of the utility's conservation plan that the utility proposes to carry out during the term of the action plan; and
- 4. A section that identifies each part of the utility's water supply and wastewater treatment plan that the utility proposes to carry out during the term of the action plan and provides the

following information for each facility for which construction will be performed during that term:

- (a) The utility's plans for construction;
- (b) The utility's proposed schedule for construction, including, without limitation, the proposed dates for:
 - (1) The preparation of any environmental impact statements, if required;
 - (2) The application for and receipt of each significant permit; and
 - (3) Entering into a commitment for each substantial expenditure;
 - (c) Any other acquisitions necessary for construction of the facility; and
 - (d) The proposed date the facility will be placed in commercial operation.
- Sec. 41. The action plan of a utility must include a budget of its planned expenditures.

 The budget must be prepared in a format that is:
 - 1. Suitable for comparing its planned expenditures with its actual expenditures; and
- 2. Consistent with the format that the utility intends to use in other submissions to the Commission, if any.
 - Sec. 42. 1. The Commission will:
 - (a) Issue an order approving the action plan of a utility as filed; or
 - (b) Specify those parts of the action plan that the Commission considers inadequate.
- 2. If the Commission approves the action plan of the utility, the Commission will include in the approval of the action plan its determination that the elements contained in the action plan are prudent. The Commission will make a determination that the elements of the action plan are prudent if:

- (a) The action plan maximizes the value of the utility's water supply and wastewater treatment capacities for the benefit of the utility's customers; and
- (b) The utility demonstrates that the action plan balances the objectives of minimizing cost, mitigating risk and maximizing reliability of service for the term of the action plan.
- 3. If the Commission subsequently determines that any information relied upon when issuing its order approving the action plan was based upon information that was known or should have been known by the utility to be false when the information was presented, the Commission may revoke, rescind or otherwise modify its approval of the action plan.
- Sec. 43. 1. Notwithstanding the approval by the Commission of the action plan of a utility, the utility may deviate from the approved action plan to the extent necessary to respond to any significant change in circumstances that was not contemplated by the action plan. A significant change in circumstances includes, without limitation:
 - (a) A substantial change in the market price of water;
 - (b) An extended forced outage of a major facility of the utility;
 - (c) A substantial change in customer demand; or
- (d) Any other circumstance that the utility demonstrates to the Commission requires a deviation.
 - 2. If a utility deviates from its approved action plan:
- (a) The Commission will determine the prudence of the deviation from the action plan in an appropriate proceeding.
- (b) If the deviation from the action plan is of a continuing nature, the utility shall request authority from the Commission to deviate prospectively from the action plan by filing an amendment to the action plan.

- Sec. 44. 1. A utility shall continually monitor its action plan and amend the action plan before it submits its next resource plan to the Commission if:
- (a) The utility intends to submit an application for a permit to construct a utility facility pursuant to NRS 704.820 to 704.890, inclusive, which was not approved as part of the action plan;
- (b) The utility makes a commitment for the acquisition or construction of a facility that was not approved as part of the action plan;
- (c) The utility makes a commitment for a long-term purchased water obligation which was not approved as part of the action plan;
- (d) The utility is unable to place a resource in service or obtain a resource in accordance with the schedule for the resource that is included in the action plan which results in a significant deviation from the action plan;
- (e) The utility makes a commitment for a resource that was not available when the action plan was approved; or
- (f) The basic data used in the development of the resource plan requires substantial modification that affects the choice of a resource which was approved as part of the action plan.
- 2. The conditions under which an amendment to an action plan is requested must be specifically set forth in the application for the amendment.
- 3. As used in this section, "resource" includes, without limitation, a facility, source of water supply or water right.
- Sec. 45. Before a utility files an amendment to its action plan, the utility must meet with the Bureau of Consumer Protection in the Office of the Attorney General and the Regulatory

Operations Staff of the Commission to provide an overview of the proposed amendment to the action plan.

- Sec. 46. An amendment to an action plan must include, without limitation:
- 1. A section that identifies each action for which the utility requests approval by the Commission;
- 2. A section that specifies any changes in assumptions or data that have occurred since the utility's last resource plan was filed with the Commission; and
- 3. If applicable, the information required in subsections 3 and 4 of section 40 of this regulation.
 - Sec. 47. 1. The Commission will:
 - (a) Issue an order approving the amendment to the action plan as filed; or
 - (b) Specify those parts of the amendment that the Commission considers inadequate.
- 2. If the Commission approves the amendment, the Commission will include in the approval of the amendment its determination that the amendment is prudent. The Commission will make a determination that the amendment is prudent if:
- (a) The amendment maximizes the value of the utility's water supply and wastewater treatment capacities for the benefit of the utility's customers; and
- (b) The utility demonstrates that the amendment balances the objectives of minimizing cost, mitigating risk and maximizing the reliability of water supply and wastewater treatment for the term of the action plan.
- 3. If the Commission subsequently determines that any information relied upon when issuing its order approving the amendment was based upon information that was known or

should have been known by the utility to be false when the information was presented, the Commission may revoke, rescind or otherwise modify its approval of the amendment.

- Sec. 48. A utility may accrue its expenses to develop a resource plan in a deferred account. The utility may request recovery of those expenses in a subsequent general rate application.
- Sec. 49. 1. Except as otherwise provided in this section, a public utility that is required to maintain a fire hydrant pursuant to NRS 704.660 shall:
 - (a) Maintain the fire hydrant in compliance with:
 - (1) The International Fire Code; and
 - (2) The <u>Uniform Plumbing Code</u>.
 - (b) Inspect and operate the fire hydrant:
 - (1) Not less than once each year; and
- (2) Not later than 3 days after receiving notice that the fire hydrant is not in compliance with the <u>International Fire Code</u> or the <u>Uniform Plumbing Code</u>.
- (c) If the utility discovers that the fire hydrant is not in compliance with the <u>International</u>

 <u>Fire Code</u> or the <u>Uniform Plumbing Code</u>, the utility shall, not later than 24 hours after the discovery:
 - (1) Notify the local agency having jurisdiction over fire protection;
- (2) Install and maintain on the fire hydrant an out-of-service ring or bag that is approved by the local agency having jurisdiction over fire protection; and
- (3) Repair the fire hydrant as soon as practicable, but in any case, not later than 30 days after discovery of the noncompliance unless the local agency having jurisdiction over fire

protection agrees to a later date for the completion of the repairs and the utility notifies the Commission of the agreement.

- (d) Paint and maintain the fire hydrant in a color scheme that is approved by the local agency having jurisdiction over fire protection.
- (e) Obtain the approval of the local agency having jurisdiction over fire protection and the Commission before removing a fire hydrant from service.
- (f) If the local agency having jurisdiction over fire protection has established a plan for inspecting fire hydrants, coordinate the utility's inspections with the local agency.
 - 2. The Commission hereby adopts by reference:
- (a) The International Fire Code, 2006 edition, published by the International Code

 Council. The publication may be obtained from the International Code Council, 500 New

 Jersey Avenue, N.W., 6th Floor, Washington, D.C., 20001-2070, by telephone at (800) 422
 7233, or at the Internet address http://www.iccsafe.org. The price of the publication is \$64.00 for members and \$85.50 for nonmembers.
- (b) The <u>Uniform Plumbing Code</u>, 2006 edition, published by the International Association of Plumbing and Mechanical Officials. The publication may be obtained from the International Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, California 91761-2816, by telephone at (800) 854-2766, or at the Internet address http://www.iapmo.org. The price of the publication is \$74 for members and \$93 for nonmembers.
- 3. The Commission will review each revision of the publications adopted by reference pursuant to subsection 2 to determine its suitability for this State. If the Commission determines that the revision is not suitable for this State, it will hold a public hearing to review

its determination and give notice of that hearing within 6 months after the date of the publication of the revision. If, after the hearing, the Commission does not revise its determination, the Commission will give notice that the revision is not suitable for this State within 30 days after the hearing. If the Commission does not give such notice, the revision becomes part of the publication adopted by reference pursuant to subsection 2.

- **Sec. 50.** NAC 704.628 is hereby amended to read as follows:
- 704.628 Each public utility subject to the provisions of NAC 704.570 to 704.628, inclusive, shall comply with the following standards of service:
- 1. For water resources, water rights must be sufficient to supply adequate amounts of water to satisfy existing commitments.
- 2. For water production, the utility must be capable of producing, from surface or ground water sources or by obtaining water from another utility, sufficient quantities of water to meet the historic maximum daily demand of the system.
- 3. For water distribution, the distribution system of the utility must meet each of the following requirements:
- (a) Service connections from the utility must not exceed the hydraulic capabilities of the system.
- (b) The network of pipes of the system must be capable of delivering maximum day demand concurrently with required fire flows. Maximum day demand must be determined from historical records or, in the absence of historical data, calculated by using a factor of three times the average day demand. Requirements for fire flow and duration of the fire flow must be established by the county or local agency having jurisdiction over fire protection. In the absence of a local agency exercising jurisdiction over fire protection, the requirements for fire flow must

be established [utilizing the most current] using the edition of the [Uniform] International Fire Code [, which is hereby] adopted by reference [. A copy of the Uniform Fire Code may be obtained, at a price of \$141.60, from the International Conference of Building Officials, 5360 Workman Mill Road, Whittier, California 90601, telephone (800) 284-4406, or on-line at http://www.icbo.org.] pursuant to section 49 of this regulation.

- (c) The distribution system, in conjunction with production, storage and pressure control facilities, must be capable of maintaining, during periods of maximum day demand, a minimum residual pressure of 40 pounds per square inch throughout the distribution system. Static pressure must not exceed 100 pounds per square inch at the lowest elevation in any pressure zone. During periods of fire flow, the residual pressure at any point in the distribution system must not fall below 20 pounds per square inch.
- (d) To deliver the quantity of water necessary to comply with the requirements of public fire protection, the utility shall provide and maintain an adequate quantity of hydrants at the prescribed spacing as established by the county or local agency having jurisdiction over fire protection. In the absence of any local agency having jurisdiction over fire protection, the spacing of fire hydrants must be determined by using the [current] edition of the [Uniform]

 International Fire Code [...] adopted by reference pursuant to section 49 of this regulation.
- (e) The utility shall not allow the amount of water lost from its distribution system because of leakage to exceed 10 percent of the amount of water required for the system.
 - (f) All water sources must have a master meter.
 - 4. For storage, the utility must provide water under both of the following circumstances:
- (a) The utility must have the ability to sustain a mechanical failure. [When] If the single most critical pump is out of service, the pumping facilities and above-ground storage of the utility

must be able to maintain the average daily flow rate plus the maximum required fire flow rate for the required duration.

- (b) The utility must have the ability to sustain a power outage. To provide system reliability during a power outage, the utility shall comply with at least one of the following:
- (1) In a power outage, pumping facilities with an alternative power source in conjunction with above-ground storage must be capable of delivering the required fire flow demand for the required duration plus maximum day demand for 1 day.
- (2) Above-ground storage must be capable of providing the required fire flow for the required duration plus the average day demand for 1 day.
- → As used in this paragraph, "above-ground storage" means the amount of water that is stored above an elevation which will maintain a hydraulic gradient above 20 pounds per square inch at any point within the distribution system during maximum demand.
 - 5. For water quality, the quality must meet all existing state and federal standards for purity.
- 6. For administration and management, adequately trained personnel must be available to operate the utility under all reasonable circumstances. Books and records maintained by the utility must comply with the systems of accounts established for class C water and sewer utilities prepared by the National Association of Regulatory Utility Commissioners, which are hereby adopted by reference. A copy of the publication containing the system established for class C water utilities and for sewer utilities may be obtained, for the price of \$15 for the system of accounts for Class C water utilities and \$16 for the system of accounts for sewer companies, from the NARUC Publications, 1101 Vermont Avenue, N.W., Suite 200, Washington, D.C. 20005, or on-line at http://www.naruc.org. Each utility shall develop and carry out a written operation and maintenance program, a cross-connection control program and an emergency plan

containing procedures unique to each system. Each utility shall have on file, at an office maintained in the State of Nevada, updated drawings, maps or other permanent records to aid in the operation of the water system. The utility shall make and maintain a record of any repairs made to a distribution pipe that sets forth the location of the leak, the date the leak was repaired, an assessment of the cause of the leak and a description of the manner used to repair the pipe.